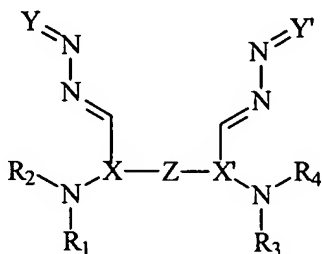


CLAIMS

What is claimed is:

1. An organophotoreceptor comprising:

(a) a charge transport material having the formula



where R₁, R₂, R₃, and R₄ comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;

X and X' comprise, each independently, an aromatic group;

Y and Y' comprise, each independently, a (disubstituted)methylene group; and

Z is a linking group;

(b) a charge generating compound; and

(c) an electrically conductive substrate on which said charge transport material and said charge generating compound are located.

2. The organophotoreceptor of claim 1 further comprising a second charge transport material.

3. The organophotoreceptor of claim 2 wherein the second charge transport material comprises a charge transport compound.

4. The organophotoreceptor of claim 1 wherein X and X' are, each independently, a C₆H₃ group.

5. The organophotoreceptor of claim 1 wherein the (disubstituted)methylene group is selected from the group consisting of a 10H-anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

6. The organophotoreceptor of claim 1 wherein the (disubstituted)methylene group is a (di-aromatic)methylene group.

7. The organophotoreceptor of claim 1 comprising:

(a) a charge transport layer comprising said charge transport material and a polymeric binder; and

(b) a charge generating layer comprising said charge generating compound and a polymeric binder.

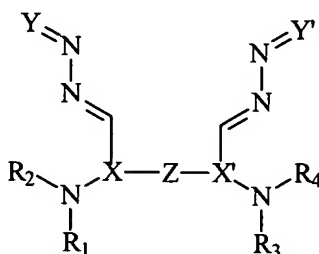
8. The organophotoreceptor of claim 1 wherein Z has the formula $-(CH_2)_m-$ where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an NR₆ group, a CR₇, or a CR₈R₉ group where R₆, R₇, R₈, and R₉ are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

9. An electrophotographic imaging apparatus comprising:

(a) a light imaging component; and

(b) an organophotoreceptor oriented to receive light from said light imaging component, said organophotoreceptor comprising:

(i) a charge transport material having the formula



where R₁, R₂, R₃, and R₄ comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;

X and X' comprise, each independently, an aromatic group;

Y and Y' comprise, each independently, a (disubstituted)methylene group; and
Z is a linking group;
(ii) a charge generating compound; and
(iii) an electrically conductive substrate on which said charge transport material and said charge generating compound are located.

10. The electrophotographic imaging apparatus of claim 9 further comprising a toner dispenser.

11. The electrophotographic imaging apparatus of claim 9 wherein the organophotoreceptor further comprises a second charge transport material.

12. The electrophotographic imaging apparatus of claim 11 wherein said second charge transport material comprises a charge transport compound.

13. The electrophotographic imaging apparatus of claim 9 wherein the (disubstituted)methylene group is selected from the group consisting of a 10H-anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

14. The electrophotographic imaging apparatus of claim 9 wherein the (disubstituted)methylene group is a (di-aromatic)methylene group.

15. The electrophotographic imaging apparatus of claim 9 wherein said organophotoreceptor comprises a belt or a drum that supports the electrically conductive substrate.

16. The electrophotographic imaging apparatus of claim 9 wherein X and X' are, each independently, a C₆H₃ group.

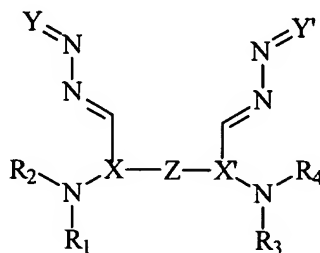
17. The electrophotographic imaging apparatus of claim 9 wherein Z has the formula -(CH₂)_m- where m is an integer between 1 and 20, inclusive, and one or

more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an NR₆ group, a CR₇, or a CR₈R₉ group where R₆, R₇, R₈, and R₉ are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

18. An electrophotographic imaging process comprising:

(a) applying an electrical charge to a surface of an organophotoreceptor comprising:

(i) a charge transport material having the formula



where R₁, R₂, R₃, and R₄ comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;

X and X' comprise, each independently, an aromatic group;

Y and Y' comprise, each independently, a (disubstituted)methylene group; and

Z is a linking group;

(ii) a charge generating compound; and

(iii) an electrically conductive substrate over which said charge transport material and said charge generating compound are located;

(b) imagewise exposing said surface of said organophotoreceptor to radiation to dissipate charge in selected areas and thereby form a pattern of charged and uncharged areas on said surface;

(c) contacting said surface with a toner to create a toned image; and

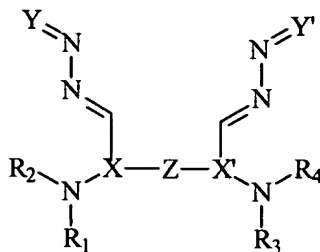
(d) transferring said toned image to a substrate.

19. The electrophotographic imaging process of claim 18 wherein said organophotoreceptor further comprises a second charge transport material.

20. The electrophotographic imaging process of claim 18 wherein Z has the formula $-(CH_2)_m-$ where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an NR₆ group, a CR₇, or a CR₈R₉ group where R₆, R₇, R₈, and R₉ are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

21. The electrophotographic imaging process of claim 18 wherein said toner comprises colorant particles.

22. A charge transport material having the formula



where R₁, R₂, R₃, and R₄ comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;
X and X' comprise, each independently, an aromatic group;
Y and Y' comprise, each independently, a (disubstituted)methylene group; and
Z is a linking group.

23. The charge transport material of claim 22 wherein X and X' are, each independently, a C₆H₃ group.

1 24. The charge transport material of claim 22 wherein the
2 (disubstituted)methylene group is selected from the group consisting of a 10H-
3 anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

1 25. The charge transport material of claim 22 wherein Z has the formula $-(CH_2)_m-$
2 where m is an integer between 1 and 20, inclusive, and one or more of the methylene
3 groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an
4 aromatic group, urethane, urea, an ester group, an NR_6 group, a CR_7 , or a CR_8R_9 group
5 where R_6 , R_7 , R_8 , and R_9 are, independently, a bond, H, hydroxyl, thiol, carboxyl, an
6 amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group,
7 or part of a ring group.